

USE OF THE GUIDELINE CATHETER TO FACILITATE COMPLEX CORONARY AND BYPASS GRAFT INTERVENTIONS

i2 Poster Contributions

Ernest N. Morial Convention Center, Hall F

Monday, April 04, 2011, 9:30 a.m.-10:45 a.m.

Session Title: PCI - Complex Lesions, Multivessel Disease

Abstract Category: 12. PCI - Complex Lesions, Multivessel Disease

Session-Poster Board Number: 2511-593

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Background: The Guideliner catheter (Vascular Solutions, Minneapolis, Minnesota) is a guide catheter extension that allows deep vessel intubation to improve guide catheter support and facilitate equipment delivery.

Methods: The Guideliner catheter was used in 14 patients after conventional treatment strategies failed.

Results: All patients were men and mean age was 65 ± 13 years. The indication for Guideliner use was challenging equipment delivery in 10 patients (71%) and difficulty engaging the vessel in 4 patients (29%). The target vessel was the right coronary artery in 12 patients and a saphenous vein graft in 2 patients. In all cases several attempts for equipment delivery or vessel engagement had failed, due to tortuosity and calcification ($n=10$, Figure A), due to a previously placed ostial stent ($n=3$, Figure B and C), or due to anterior takeoff of the right coronary artery ($n=1$). The mean Guideliner intubation length was 43 ± 27 mm. Use of the Guideliner catheter resulted in procedure success in 12 of 14 cases (86%). Specifically, successful stent and balloon delivery was achieved in 8 of 10 cases, and successful vessel engagement was achieved in 4 of 4 cases. Stent loss did not occur in any patient; however, pressure dampening upon deep engagement was observed in 10 patients (71%). No procedural complications occurred.

Conclusion: Use of the Guideliner catheter can significantly and safely facilitate equipment delivery and vessel engagement in challenging percutaneous coronary interventions.

